



**ENTERED**

1600

## RAW SEQUENCE LISTING

DATE: 08/18/2003

PATENT APPLICATION: US/10/026,952A

TIME: 09:02:09

Input Set : N:\Crf3\Refhold\J026952.raw

Output Set: N:\CRF4\08182003\J026952A.raw

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1 <110> APPLICANT: Nazarenko, Irina
2   Rashtchian, Ayoub
3   Solus, Joseph
4   Pires, Richard M.
5   Darfler, Marlene
6   Gebeyehu, Gulilat
7   Astatke, Mekbib
8 <120> TITLE OF INVENTION: Primers and Methods for the Detection and
9   Discrimination of Nucleic Acids
10 <130> FILE REFERENCE: 0942.4980006
11 <140> CURRENT APPLICATION NUMBER: US/10/026,952A
12 <141> CURRENT FILING DATE: 2002-04-30
13 <150> PRIOR APPLICATION NUMBER: 60/330,468
14 <151> PRIOR FILING DATE: 2001-10-23
15 <150> PRIOR APPLICATION NUMBER: 60/139,890
16 <151> PRIOR FILING DATE: 1999-06-22
17 <150> PRIOR APPLICATION NUMBER: 60/175,959
18 <151> PRIOR FILING DATE: 2000-01-13
19 <150> PRIOR APPLICATION NUMBER: 09/599,594
20 <151> PRIOR FILING DATE: 2000-06-22
21 <150> PRIOR APPLICATION NUMBER: 09/748,146
22 <151> PRIOR FILING DATE: 2000-12-27
23 <160> NUMBER OF SEQ ID NOS: 139
24 <170> SOFTWARE: PatentIn version 3.1
26 <210> SEQ ID NO: 1
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28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Primer
32 <220> FEATURE:
33 <221> NAME/KEY: misc_feature
34 <222> LOCATION: (18)..(18)
35 <223> OTHER INFORMATION: Fluorescently labeled
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37   ccttctcatg gtggctgtag aac
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42 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Primer
45 <220> FEATURE:

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Output Set: N:\CRF4\08182003\J026952A.raw

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48 <223> OTHER INFORMATION: Fluorescently labeled
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51                                     23
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53 <211> LENGTH: 23
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Primer
58 <400> SEQUENCE: 3
59      ggtctacagc caccatgaga agg
60                                     23
61 <210> SEQ ID NO: 4
62 <211> LENGTH: 23
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Primer
67 <400> SEQUENCE: 4
68      ggggctgcga ctgtgctccg gca
69                                     23
70 <210> SEQ ID NO: 5
71 <211> LENGTH: 23
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Primer
76 <400> SEQUENCE: 5
77      tgccggagca cagtcgcagc ccc
78                                     23
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 20
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Primer
85 <220> FEATURE:
86 <221> NAME/KEY: misc_feature
87 <222> LOCATION: (1)..(1)
88 <223> OTHER INFORMATION: Fluorescently labeled
89 <400> SEQUENCE: 6
90      aataatagga tgaggcagga
91                                     20
92 <210> SEQ ID NO: 7
93 <211> LENGTH: 20
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Primer
98 <220> FEATURE:
99 <221> NAME/KEY: misc_feature

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Output Set: N:\CRF4\08182003\J026952A.raw

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100 <222> LOCATION: (1)..(1)
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105 <210> SEQ ID NO: 8
106 <211> LENGTH: 20
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Primer
111 <400> SEQUENCE: 8
112     tcctgcctca tcctattatt                                20
114 <210> SEQ ID NO: 9
115 <211> LENGTH: 23
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Primer
120 <400> SEQUENCE: 9
121     gagttgaccg taacagacat ctt                            23
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 24
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Primer
129 <400> SEQUENCE: 10
130     ggcattgccg acaggatgta gaag                            24
132 <210> SEQ ID NO: 11
133 <211> LENGTH: 18
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Primer
138 <400> SEQUENCE: 11
139     gggccggact cgtcatac                                    18
141 <210> SEQ ID NO: 12
142 <211> LENGTH: 28
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: Primer
147 <400> SEQUENCE: 12
148     ggttgtagag cactcagcac aatgaaga                        28
150 <210> SEQ ID NO: 13
151 <211> LENGTH:
152 <212> TYPE:
153 <213> ORGANISM:
154 <400> SEQUENCE: 13

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## RAW SEQUENCE LISTING

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TIME: 09:02:09

Input Set : N:\Crf3\Refhold\J026952.raw

Output Set: N:\CRF4\08182003\J026952A.raw

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161 <220> FEATURE:
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163 <400> SEQUENCE: 14
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166 <210> SEQ ID NO: 15
167 <211> LENGTH: 23
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: Primer
172 <400> SEQUENCE: 15
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175 <210> SEQ ID NO: 16
176 <211> LENGTH: 24
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Primer
181 <400> SEQUENCE: 16
182      gtgtccttct catggtggct gtag
184 <210> SEQ ID NO: 17
185 <211> LENGTH: 24
186 <212> TYPE: DNA
187 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Primer
190 <400> SEQUENCE: 17
191      gtgtccttct catggtggct gtat
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194 <211> LENGTH:
195 <212> TYPE:
196 <213> ORGANISM:
197 <400> SEQUENCE: 18

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202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Primer
206 <220> FEATURE:
207 <221> NAME/KEY: misc_feature
208 <222> LOCATION: (18)..(18)
209 <223> OTHER INFORMATION: Fluorescently labeled

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## RAW SEQUENCE LISTING

DATE: 08/18/2003

PATENT APPLICATION: US/10/026,952A

TIME: 09:02:09

Input Set : N:\Crf3\Refhold\J026952.raw

Output Set: N:\CRF4\08182003\J026952A.raw

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210 <400> SEQUENCE: 19
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215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Primer
219 <220> FEATURE:
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221 <222> LOCATION: (22)..(22)
222 <223> OTHER INFORMATION: Fluorescently labeled
223 <400> SEQUENCE: 20
224      gtgtccttct catggtggct gtag
226 <210> SEQ ID NO: 21
227 <211> LENGTH: 24
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Primer
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (22)..(22)
235 <223> OTHER INFORMATION: Fluorescently labeled
236 <400> SEQUENCE: 21
237      gtgtccttct catggtggct gtat
239 <210> SEQ ID NO: 22
240 <211> LENGTH: 25
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Primer
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: (23)..(23)
248 <223> OTHER INFORMATION: Labeled with fluoroscein
249 <400> SEQUENCE: 22
250      ctaccgggtg tctgtgtctc ggtag
252 <210> SEQ ID NO: 23
253 <211> LENGTH: 20
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Primer
258 <400> SEQUENCE: 23
259      cgtacctggc tatctgtgtc
261 <210> SEQ ID NO: 24
262 <211> LENGTH: 20
263 <212> TYPE: DNA

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/026,952A

DATE: 08/18/2003  
TIME: 09:02:10

Input Set : N:\Crf3\Refhold\J026952.raw  
Output Set: N:\CRF4\08182003\J026952A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:85; N Pos. 23  
Seq#:92; N Pos. 32  
Seq#:129; N Pos. 16  
Seq#:131; N Pos. 1,2

## VERIFICATION SUMMARY

DATE: 08/18/2003

PATENT APPLICATION: US/10/026,952A

TIME: 09:02:10

Input Set : N:\Crif3\Refhold\J026952.raw

Output Set: N:\CRF4\08182003\J026952A.raw

L:155 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (13) SEQUENCE:  
L:198 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (18) SEQUENCE:  
L:486 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (48) SEQUENCE:  
L:493 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (49) SEQUENCE:  
L:500 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (50) SEQUENCE:  
L:703 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (71) SEQUENCE:  
L:849 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0  
L:925 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0  
L:932 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (93) SEQUENCE:  
L:965 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (96) SEQUENCE:  
L:1094 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (107) SEQUENCE:  
L:1101 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (108) SEQUENCE:  
L:1162 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (115) SEQUENCE:  
L:1209 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (120) SEQUENCE:  
L:1216 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (121) SEQUENCE:  
L:1250 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (125) SEQUENCE:  
L:1290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:0  
L:1316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:0  
L:1367 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (136) SEQUENCE:  
L:1374 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (137) SEQUENCE:  
L:1381 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (138) SEQUENCE:

## STATISTICS SUMMARY

DATE: 08/18/2003

PATENT APPLICATION: US/10/026,952A

TIME: 09:02:10

Input Set : N:\Crf3\Refhold\J026952.raw

Output Set: N:\CRF4\08182003\J026952A.raw

Application Serial Number: US/10/026,952A

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 04-30-2002

Art Unit: 1600

Software Application: PatentIN3.1

Total Number of Sequences: 139

Total Nucleotides: 3010

Total Amino Acids: 0

Number of Errors: 0

Number of Warnings: 21

Number of Corrections: 0

## MESSAGE SUMMARY

300 W: 17 ((50) Intentionally skipped Sequence)

341 W: 4 ((46) "n" or "Xaa" used)